

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (currently amended): A method of concentrating a material comprising at least a first component and a second component, to form a product having an increased concentration of one of said first and second components, said method comprising:

- (a) removing salts from said material;
- (b) cooling at least a portion of said material to a temperature at or below the melting point of said material, said portion containing said first component in liquid phase;
- (c) applying ultrasonic energy to at least said cooled portion of said material to form a solid phase comprising said first component; and
- (d) collecting said solid phase,

wherein said material comprises at least one member selected from the group consisting of blood plasma, a blood plasma concentrate, and mixtures thereof.

Claim 2 (previously presented): The method of Claim 1, wherein said steps of cooling and applying ultrasonic energy comprise passing said material adjacent a first sonified cooling plate.

Claim 3 (currently amended): The method of Claim 2, wherein said steps of cooling and applying ultrasonic energy comprise passing ~~the~~ said material between first and second cooling plates, at least said first cooling plate comprising a sonified cooling plate.

Claim 4 (original): The method of Claim 3, wherein said first and second cooling plates each comprise sonified cooling plates.

Claim 5 (currently amended): The method of Claim 1, wherein ~~said material comprises an aqueous material and said first component comprises water, and wherein~~ said cooling step comprises cooling at least a portion of said ~~aqueous~~ material to below 0°C.

Claim 6 (currently amended): The method of Claim 1, further comprising depositing said material into a thin walled flexible container, and wherein said steps of cooling and applying ultrasonic energy are carried out across a wall portion of ~~the~~ said flexible container.

Claim 7 (previously presented): The method of Claim 1, wherein said step of collecting said solid phase comprises centrifuging the material containing said solid phase.

Claim 8 (canceled).

Claim 9 (previously presented): The method of Claim 1, wherein said step of removing salts from said material comprises effecting a transfer of salts across a dialysis membrane.

Claim 10 (original): The method of Claim 1, further comprising monitoring the concentration of at least one component in said product.

Claim 11 (original): The method of Claim 10, wherein said step of monitoring the concentration comprises sensing the resistivity of said product.

Claim 12 (original): The method of Claim 10, wherein said step of monitoring the concentration comprises sensing the viscosity or optical properties of said product.

Claim 13 (original): The method of Claim 1, further comprising testing for the presence of one or more contaminants in said product.

Claims 14-41 (canceled).

Claim 42 (new): The method of Claim 1, wherein said material comprises blood plasma.

Claim 43 (new): The method of Claim 1, wherein said material comprises a blood plasma concentrate.

Claim 44 (new): The method of Claim 1, wherein said material is cooled to a temperature of -0.5°C to -1°C .

Claim 45 (new): The method of Claim 2, wherein said material is initially cooled to a temperature of -1°C and then further cooled to a lower temperature.

Claim 46 (new): The method of Claim 2, wherein said material is cooled to a temperature of -0.5°C to -5°C .

Claim 47 (new): The method of Claim 2, wherein said material comprises blood plasma.

Claim 48 (new): The method of Claim 2, wherein said material comprises a blood plasma concentrate.

Claim 49 (new): The method of Claim 2, wherein said material is cooled to a temperature of -0.5°C to -1°C .

Claim 50 (new): The method of Claim 2, wherein said material is initially cooled to a temperature of -1°C and then further cooled to a lower temperature.

Claim 51 (new): The method of Claim 2, wherein said material is cooled to a temperature of -0.5°C to -5°C .

Claim 52 (new): The method of Claim 3, wherein said material comprises blood plasma.

Claim 53 (new): The method of Claim 3, wherein said material comprises a blood plasma concentrate.

Claim 54 (new): The method of Claim 3, wherein said material is cooled to a temperature of -0.5°C to -1°C .

Claim 55 (new): The method of Claim 3, wherein said material is initially cooled to a temperature of -1°C and then further cooled to a lower temperature.

Claim 56 (new): The method of Claim 3, wherein said material is cooled to a temperature of -0.5°C to -5°C .

Claim 57 (new): The method of Claim 4, wherein said material comprises blood plasma.

Claim 58 (new): The method of Claim 4, wherein said material comprises a blood plasma concentrate.

Claim 59 (new): The method of Claim 4, wherein said material is cooled to a temperature of -0.5°C to -1°C .

Claim 60 (new): The method of Claim 4, wherein said material is initially cooled to a temperature of -1°C and then further cooled to a lower temperature.

Claim 61 (new): The method of Claim 4, wherein said material is cooled to a temperature of -0.5°C to -5°C .

Claim 62 (new): The method of Claim 9, wherein said material comprises blood plasma.

Claim 63 (new): The method of Claim 9, wherein said material comprises a blood plasma concentrate.

Claim 64 (new): The method of Claim 9, wherein said material is cooled to a temperature of -0.5°C to -1°C .

Claim 65 (new): The method of Claim 9, wherein said material is initially cooled to a temperature of -1°C and then further cooled to a lower temperature.

Claim 66 (new): The method of Claim 9, wherein said material is cooled to a temperature of -0.5°C to -5°C .